

Rec'd PCT TO 17 JUN 2005

TRANSLATION (HM-645PCT -- IPER)

10/539529

TREATY ON INTERNATIONAL COOPERATION IN THE AREA OF PATENTS

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(Article 36 and Rule 70 of the PCT)

Applicant's or Agent's File Ref. 41 474.:sev	FOR FURTHER ACTION		See Notification of Transmittal of the International Preliminary Examination Report (Form PCT/IPEA/416).
International Application No. PCT/EP03/14233	International Filing Date (Month/Day/Year) December 15, 2003	Priority Date (Month/Day/Year) December 20, 2002	
International Patent Classification (IPC) or National Classification and IPC B23D15/08			
Applicant SMS DEMAG AKTIENGESELLSCHAFT et al.			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 pages, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., pages of the description, claims, and/or drawings which have been amended and are the basis for this report and/or pages containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 5 pages.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive activity, and commercial viability.
- IV ☐ Lack of unity of invention.
- V ☒ Substantiated determination under Rule 66.2 a(ii) with regard to novelty, inventive activity, and commercial viability; citations and explanations supporting such statement.
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the petition: July 1, 2004	Date of completion of this report: December 28, 2004
Name and mailing address of the office assigned to perform the preliminary examination: European Patent Office D-80298 Munich Tel: +49 89 2399-0 Tx: 523656 epmu d Fax: +49 89 2399-4465	Authorized Officer: Wimmer, M. Tel: +49 89 2399-7031

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

10/539529
JC05 Rec'd PCT/PTO 17 JUN 2005

International File No.: **PCT/EP03/14233**

I. Basis of the Report

1. With regard to the **constituent parts** of the international application (*replacement pages which were submitted to the application office in compliance with a request according to Article 14 are considered "originally filed" in the context of this report and are not attached to the report, because they do not contain any changes (Rules 70.16 and 70.17)*):

Specification, pages:

1-3, 6-11 as originally filed
4, 5, 5a received on November 24, 2004 with telefa

Claims, Nos.:

1-9 received on November 24, 2004 with telefax

Drawings, Pages:

1/7-7/7 as originally filed

2. With respect to the **language**, all the constituent parts marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise cited under this item.

The constituent parts were available or furnished to this Authority in the following language:
which is:

- ☐ the language of a translation furnished for the purpose of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purpose of international preliminary examination (under Rule 55.2 and/or Rule 55.3).

3. With regard to the **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer-readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer-readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the

disclosure in the international application as filed has been furnished.

- ☐ The statement that the information recorded in computer-readable form is identical to the written listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets/figures:

5. ☐ This report has been prepared as if (some of) the amendments had not been made, since for the specified reasons they are considered by this Authority to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Any additional remarks:

V. Substantiated determination according to Article 35(2) with respect to novelty, inventive activity, and commercial viability; documents and declarations in support of this determination.

1. Determination

Novelty (N)	Yes:	Claims 1-9
	No:	Claims
Inventive Activity (AI):	Yes:	Claims 1-9
	No:	Claims
Commercial Viability (CV):	Yes:	Claims 1-9
	No:	Claims

2. Documents and Declarations

See attached page.

INTERNATIONAL PRELIMINARY

EXAMINATION REPORT – ATTACHED PAGE

International File No.: **PCT/EP03/14233**

Re Point V

Substantiated determination with respect to novelty, inventive activity, and commercial viability; documents and declarations in support of this determination.

The following documents are cited:

D1: DE 34 02 567 A (PEDDINGHAUS CARL ULLRICH DR) August 8, 1985
(1985-08-08)

D2: DE 26 58 137 A (ISHIKAWAJIMA HARIMA HEAVY IND) August 11, 1977
(1977-08-11)

D3: US-A-1 986 685 (SODERBERG ANDREW W) January 1, 1935 (1935-01-01)

Document **D1**, which is regarded as the closest prior art, discloses a cut-to-length shear, from which the object of Claim 1 differs in that a special shear design is housed in a column and in that the lower driver rolls have a central bearing.

The object of Claim 1 is thus novel (Article 33(2) PCT).

The objective to be achieved by the present invention can thus be seen as the introduction of the driver forces directly into the shear columns.

The solution to this problem that is proposed in Claim 1 of the present application is based on inventive activity for the following reasons (Article 33(3) PCT):

Although both Document **D2** and Document **D3** disclose the solution of the shear design and its position in the shear column, none of the available prior-art documents suggests the use of driver rolls supported in the center.

Claims 2-9 are dependent on Claim 1 and thus also fulfill the requirements of the PCT

with respect to novelty and inventive activity.

The invention is also unquestionably commercially viable, because it can be used in the steel industry.